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Docket No. 040116

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REMARKS

Claims 1-20 are all of the claims presently pending in the application. Applicants have not amended the claims by the present response.

Applicants gratefully acknowledge the Examiner's indication that claims 3, 8, 10, 12-13, and 17 would be allowable if rewritten in independent form. Applicants respectfully submit that all of the claims are allowable.

Claims 1-2, 4-7, 9, 11, 14-16, and 18-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hase (JP 06-181028) taken in combination with Koch (U.S. Patent No. 3,813,627).

This rejection is respectfully traversed in the following discussion.

THE CLAIMED INVENTION I.

An exemplary embodiment of the claimed invention, as defined by, for example, independent claim 1, is directed to a cord type thermal fuse that includes a fuse core produced by winding a conductor meltable at a predetermined temperature around an insulating core member continuously elongating in the length direction of the insulating core member, and an insulating cover covering the outside of insulating core member. The conductor can be broken by expanding the insulating core member at a predetermined temperature and/or by contracting the insulating cover as the predetermined temperature. The insulating core member includes a gas-containing material.

Accordingly, the fuse will accurately disconnect at a predetermined temperature.

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11. THE PRIOR ART REFERENCES

The Examiner alleges that Hase would have been combined with Koch to teach the claimed invention of claims 1, 2, 4-7, 9, 11, 14-16, and 18-20. Applicants submit, however, that these references would not have been combined as alleged by the Examiner and that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention.

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That is, the alleged combination of references does not teach or suggest, "said insulating core member comprises a gas-containing material", as recited in exemplary claim 1.

The Examiner concedes that Hase does not teach or suggest this feature of the claimed invention (see Office Action dated October 16, 2007 at page 3).

The Examiner, however, alleges, "Koch teaches that is known to have an insulating core member (16) that is a gas-containing material (see col. 4, lines 60-67). It would have been obvious at the time the invention as made to have used a gas-containing material as an insulating core of a fuse as taught by Koch, since Koch states at col. 4, lines 62-67 that such a modification would have allowed for gas to be evolved, thereby providing certain breaking of the fuse elements and providing further electrical connection." (See Office Action dated October 16, 2007 at page 3).

The Examiner, however, is clearly incorrect.

That is, Hase teaches away from the Examiner's alleged combination. In Hase, the core member 1 is a tensile strength material (e.g., see Hase at Abstract). Including the gascontaining material of Koch in the core member 1 of Hase would create pores in the core member 1, thus reducing the tensile strength of the core member. Accordingly, Hase teaches away from the alleged combination.

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Moreover, Koch fails to make up the deficiencies of Hase. That is, Koch does not

teach or suggest, "said insulating core member comprises a gas-containing material". Indeed, Koch merely teaches that the electric insulation material is adapted to evolve gas (see Koch at column 4, lines 60-67). Koch does not teach or suggest a gas-containing material. Indeed, Koch specifically teaches that the insulating material is a thermosetting material including a filler having water of hydration. Thus, Koch teaches that the insulating material includes a liquid filler.

Thus, Koch fails to make up the deficiencies of Hase.

In summary, Koch does not teach or suggest any structure corresponding to "...said insulating core member comprises a gas-containing material." Thus, even by combining the elements of Hase with those of Koch, it is impossible to achieve the structure of claim 1 of the present invention.

Therefore, Applicants submit that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention.

Therefore, Applicants respectfully request the Examiner to withdraw this rejection.

III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicants submit that claims 1-20, all of the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. Applicants respectfully request the Examiner to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance,

Applicants requests the Examiner to contact the undersigned at the local telephone number

listed below to discuss any other changes deemed necessary in a telephonic or personal

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interview.

The undersigned authorizes the Commissioner to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: Jony 16, 2-18

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FACSIMILE TRANSMISSION

I hereby certify that I am filing this paper via facsimile, to Group Art Unit 2835, at (571) 273-8300, on January 16, 2008.

Date: Jan /4, 208

Respectfully Submitted,

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